ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-185398-1

Client Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Revision: 1

For:

Cardno, Inc 970 Wedgewood Drive Crystal Lake, Illinois 60014

Attn: Ms. Cheryl Hennessy

Authorized for release

Authorized for release by: 6/9/2019 6:45:32 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Project/Site: ITC WW-20190512-002-Day 10 05-12-19

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Case Narrative

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Job ID: 600-185398-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-185398-1

Comments

This report was revised 6-9-19 updating the reporting limits for the 608 analysis performed in TA Houston in regard to dicofol.

Receipt

The samples were received on 5/13/2019 4:02 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.4° C and 5.0° C.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC

Method(s) 531.1: The laboratory control sample (LCS) associated with analytical batch 680-571548 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method(s) 531.1: The continuing calibration verification (CCV) associated with batch 680-571548 recovered outside acceptance criteria, low biased, for Carbaryl. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 531.1: This sample failed high for ISTD and was a non detected. This sample has been reported.

WW-20190512-002-Day 10 (600-185398-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 608: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 600-265085 and analytical batch 600-265203 recovered outside control limits for the following analytes: Dicofol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method Nonylphenols aqueous in preparation batch 320-296808.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Lab Admin

This report was revised updating the reporting limits for the 608 analysis performed in TA Houston in regard to dicofol .

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Method Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method	Method Description	Protocol	Laboratory
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CC
Organotins/GCMS	Organotins (GC/MS)	TAL SOP	TAL BUR
WS-MS-0010	Nonylphenols	TAL SOP	TAL SAC
608	Organochlorine Pesticides in Water	40CFR136A	TAL HOU
531.1	Carbamate Pesticides (HPLC)	EPA	TAL SAV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL HOU
CWA_Prep_CLLE	Liquid-Liquid Extraction (Continuous)	40CFR136A	TAL CC

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL CC = Eurofins TestAmerica, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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Sample Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-185398-1	WW-20190512-002-Day 10	Water	05/12/19 11:30	05/13/19 16:02	

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Client Sample Results

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Client Sample ID: WW-20190512-002-Day 10 Lab Sample ID: 600-185398-1

Date Collected: 05/12/19 11:30 **Matrix: Water** Date Received: 05/13/19 16:02

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	0.861	U	10.0	0.861	ug/L		05/17/19 15:00	05/20/19 09:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	86		26 - 120				05/17/19 15:00	05/20/19 09:07	1
2-Fluorobiphenyl	82		22 - 120				05/17/19 15:00	05/20/19 09:07	1
Terphenyl-d14	86		10 - 134				05/17/19 15:00	05/20/19 09:07	1
Phenol-d5 (Surr)	81		10 - 120				05/17/19 15:00	05/20/19 09:07	
2-Fluorophenol	78		10 - 120				05/17/19 15:00	05/20/19 09:07	1
2,4,6-Tribromophenol	78		24 - 131				05/17/19 15:00	05/20/19 09:07	1
Method: Organotins/GCMS -	Organotins ((GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tributyltin	0.0446	U	0.0446	0.0446	ug/L		05/17/19 13:00	05/22/19 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tripentyltin	90		15 - 150				05/17/19 13:00	05/22/19 12:40	1
Method: WS-MS-0010 - Nonyl	phenols								
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	1.60	U	5.01	1.60	ug/L		05/24/19 12:45	05/24/19 23:23	1
Bisphenol-A	0.321	U	1.00	0.321	ug/L		05/24/19 12:45	05/24/19 23:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-nonylphenol monoethoxylate (Surr)	70		47 - 138				05/24/19 12:45	05/24/19 23:23	1
Method: 608 - Organochlorine	e Pesticides	in Water							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Dicofol	0.200	U *	0.200	0.200	ug/L		05/15/19 08:42	05/16/19 19:52	
Mirex	0.0200	U	0.200	0.0200	ug/L		05/15/19 08:42	05/16/19 19:52	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Tetrachloro-m-xylene	97		32 - 143				05/15/19 08:42	05/16/19 19:52	-
DCB Decachlorobiphenyl	76		36 - 144				05/15/19 08:42	05/16/19 19:52	
Method: 531.1 - Carbamate Po	esticides (H	PLC)							
Method: 531.1 - Carbamate Po	•	PLC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Definitions/Glossary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Qualifiers

GC/MS Semi VOA

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier	Description

* LCS or LCSD is outside acceptance limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description

* LCS or LCSD is outside acceptance limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly	y used abbreviations ma	y or may not be	present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

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Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

_			Pe	ercent Surre	ogate Reco	very (Accer	tance Lim
		NBZ	FBP	TPHL	PHL	2FP	TBP
Lab Sample ID	Client Sample ID	(26-120)	(22-120)	(10-134)	(10-120)	(10-120)	(24-131)
600-185398-1	WW-20190512-002-Day 10	86	82	86	81	78	78
LCS 560-162753/2-A	Lab Control Sample	85	82	92	83	80	90
LCSD 560-162753/3-A	Lab Control Sample Dup	86	85	93	85	79	88
MB 560-162753/1-A	Method Blank	83	79	88	78	75	81

Surrogate Legend

NBZ = Nitrobenzene-d5

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

PHL = Phenol-d5 (Surr)

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

Method: Organotins/GCMS - Organotins (GC/MS)

Matrix: Water Prep Type: Total/NA

_			Percent Surrogate Recovery (Acceptance Limits)
		TPTT	
Lab Sample ID	Client Sample ID	(15-150)	
600-185398-1	WW-20190512-002-Day 10	90	
LCS 200-143150/2-A	Lab Control Sample	85	
LCSD 200-143150/3-A	Lab Control Sample Dup	97	
MB 200-143150/1-A	Method Blank	83	
Surrogate Legend			
TPTT = Tripentyltin			

Method: WS-MS-0010 - Nonylphenols

Matrix: Water Prep Type: Total/NA

	4NPME	
Client Sample ID	(47-138)	
WW-20190512-002-Day 10	70	
Lab Control Sample	100	
Lab Control Sample Dup	104	
Method Blank	76	
L	WW-20190512-002-Day 10 .ab Control Sample .ab Control Sample Dup	WW-20190512-002-Day 10 70 Lab Control Sample 100 Lab Control Sample Dup 104 Method Blank 76

Method: 608 - Organochlorine Pesticides in Water

Matrix: Water Prep Type: Total/NA

_			Pe
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(32-143)	(36-144)
600-185398-1	WW-20190512-002-Day 10	97	76
LCS 600-265085/2-A	Lab Control Sample	87	89
LCS 600-265085/9-A	Lab Control Sample	94	102
LCSD 600-265085/10-A	Lab Control Sample Dup	90	98
LCSD 600-265085/3-A	Lab Control Sample Dup	80	90

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Surrogate Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

DCBP = DCB Decachlorobiphenyl

Method: 608 - Organochlorine Pesticides in Water (Continued)

Matrix: Water Prep Type: Total/NA

			Perce	nt Surrogate Recovery (Acceptance Limits)
Lab Sample ID MB 600-265085/1-A	Client Sample ID Method Blank	TCX1 (32-143) 68	DCBP1 (36-144) 79	
Surrogate Legend TCX = Tetrachloro-m-	-xylene			

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Job ID: 600-185398-1

05/17/19 15:00 05/20/19 06:14

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method: 625 - Semivolatile Organic Compounds (GC/MS)

0.861 U

Lab Sample ID: MB 560-162753/1-A Client Sample ID: Method Blank Prep Type: Total/NA **Matrix: Water Analysis Batch: 162775 Prep Batch: 162753**

MR MR Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Analyte 10.0

0.861 ug/L

MB MB Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed Nitrobenzene-d5 05/17/19 15:00 05/20/19 06:14 83 26 - 120 79 2-Fluorobiphenyl 22 - 120 05/17/19 15:00 05/20/19 06:14 Terphenyl-d14 88 10 - 134 05/17/19 15:00 05/20/19 06:14 Phenol-d5 (Surr) 78 10 - 120 05/17/19 15:00 05/20/19 06:14 2-Fluorophenol 75 10 - 120 05/17/19 15:00 05/20/19 06:14 2,4,6-Tribromophenol 81 24 - 131 05/17/19 15:00 05/20/19 06:14

Lab Sample ID: LCS 560-162753/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 162775

Client: Cardno, Inc

2,4,5-Trichlorophenol

LCS LCS Spike %Rec.

Added Limits Analyte Result Qualifier Unit %Rec 200 2,4,5-Trichlorophenol 167.1 ug/L 84 50 - 120

LCS LCS Surrogate %Recovery Qualifier Limits Nitrobenzene-d5 85 26 - 120 2-Fluorobiphenyl 82 22 - 120 Terphenyl-d14 92 10 - 134 Phenol-d5 (Surr) 83 10 - 120 2-Fluorophenol 80 10 - 120 2,4,6-Tribromophenol 90 24 - 131

Lab Sample ID: LCSD 560-162753/3-A **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 162775 Prep Batch: 162753 Spike LCSD LCSD **RPD** %Rec. Added Analyte Result Qualifier Unit %Rec Limits **RPD** Limit

200 2,4,5-Trichlorophenol 83 50 - 120 40.0 165.1 ug/L LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
Nitrobenzene-d5	86		26 - 120
2-Fluorobiphenyl	85		22 - 120
Terphenyl-d14	93		10 - 134
Phenol-d5 (Surr)	85		10 - 120
2-Fluorophenol	79		10 - 120
2,4,6-Tribromophenol	88		24 - 131

Method: Organotins/GCMS - Organotins (GC/MS)

Lab Sample ID: MB 200-143150/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water Analysis Batch: 143256

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0450 U Tributyltin 0.0450 0.0450 ug/L 05/17/19 13:00 05/22/19 11:14

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Prep Batch: 162753

Prep Batch: 143150

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method: Organotins/GCMS - Organotins (GC/MS) (Continued)

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared A	nalyzed Dil Fac	1
Tripentyltin	83		15 - 150	05/17/19 13:00 05/2	2/19 11:14 1	

Lab Sample ID: LCS 200-143150/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 143256 Prep Batch: 143150** LCS LCS Spike %Rec. Added Limits Analyte Result Qualifier Unit D %Rec

0.3636

ug/L

82

30 - 150

0.445

LCS LCS Surrogate %Recovery Qualifier Limits 15 - 150 Tripentyltin 85

Lab Sample ID: LCSD 200-143150/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Water

Analysis Batch: 143256

Tributyltin

Prep Batch: 143150 Spike LCSD LCSD %Rec. **RPD** Added Analyte Result Qualifier Limits RPD Limit Unit D %Rec Tributyltin 0.445 0.3957 ug/L 89 30 - 150 8 30

LCSD LCSD Surrogate %Recovery Qualifier Limits 15 - 150 Tripentyltin 97

Method: WS-MS-0010 - Nonylphenols

Lab Sample ID: MB 320-296808/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA **Prep Batch: 296808**

Analysis Batch: 296960

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	1.60	U	5.00	1.60	ug/L		05/24/19 12:45	05/24/19 19:45	1
Bisphenol-A	0.320	U	1.00	0.320	ug/L		05/24/19 12:45	05/24/19 19:45	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 05/24/19 12:45 05/24/19 19:45 4-nonylphenol monoethoxylate (Surr) 76 47 - 138

Lab Sample ID: LCS 320-296808/2-A

Matrix: Water Prep Type: Total/NA **Analysis Batch: 296960 Prep Batch: 296808** Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Nonylphenol 24.0 21.17 ug/L 88 35 - 133 ug/L Bisphenol-A 4.80 4.145 86 42 - 120

LCS LCS Limits Surrogate %Recovery Qualifier 100 47 - 138 4-nonylphenol monoethoxylate

(Surr)

Eurofins TestAmerica, Houston

Client Sample ID: Lab Control Sample

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method: WS-MS-0010 - Nonylphenols (Continued)

Lab Sample ID: LCSD 320-296808/3-A

Matrix: Water

Analysis Batch: 296960

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 296808

Analysis Daton, 230300							i ieh ne	ALCII. Z	,0000
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nonylphenol	24.0	21.11		ug/L		88	35 - 133	0	35
Bisphenol-A	4.80	3.228		ug/L		67	42 - 120	25	35

LCSD LCSD

%Recovery Qualifier Surrogate Limits 47 - 138 4-nonylphenol monoethoxylate 104

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 600-265085/1-A **Client Sample ID: Method Blank**

Matrix: Water

Analysis Batch: 265203

Prep Type: Total/NA

Prep Batch: 265085

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte D Prepared Analyzed Dicofol 0.200 U 0.200 0.200 ug/L 05/15/19 08:41 05/16/19 16:37 Mirex 0.0200 U 0.200 0.0200 ug/L 05/15/19 08:41 05/16/19 16:37

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
Tetrachloro-m-xylene	68		32 - 143	05/15/19 08:41 05/16/19 16:37	1
DCB Decachlorobiphenyl	79		36 - 144	05/15/19 08:41 05/16/19 16:37	1

Lab Sample ID: LCS 600-265085/2-A

Matrix: Water

Analysis Batch: 265203

Client Sample ID:	: Lab Control Sample
	Prep Type: Total/NA
	D. D. C.L. DOFOOF

Prep Batch: 265085 LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits

Aldrin 1.00 1.195 ug/L 119 42 - 122 Dieldrin 1.00 1.306 ug/L 131 36 - 146

LCS LCS Limits Surrogate %Recovery Qualifier Tetrachloro-m-xylene 32 - 143 87 DCB Decachlorobiphenyl 89 36 - 144

Lab Sample ID: LCS 600-265085/9-A

Matrix: Water

Analysis Batch: 265203

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 265085

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Dicofol 4.00 6.908 173 70 - 130 ug/L Mirex 4.00 3.250 ug/L 81

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	94		32 - 143
DCB Decachlorobiphenyl	102		36 - 144

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Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCSD 600-265085/10-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 265203

Prep Type: Total/NA **Prep Batch: 265085**

Spike LCSD LCSD **RPD** %Rec. Analyte Added Result Qualifier %Rec Limits RPD Limit Unit Dicofol 4.00 7.007 175 70 - 130 20 ug/L NaN Mirex 4.00 3.324 ug/L 83 NaN

LCSD LCSD

%Recovery Qualifier Surrogate Limits 32 - 143 Tetrachloro-m-xylene 90 DCB Decachlorobiphenyl 98 36 - 144

Lab Sample ID: LCSD 600-265085/3-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 265203

Prep Type: Total/NA

Prep Batch: 265085

Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Aldrin 1.00 1.211 42 - 122 20 ug/L 121 Dieldrin 1.00 20 1.339 ug/L 134 36 - 146 2

LCSD LCSD

Surrogate %Recovery Qualifier Limits 32 - 143 Tetrachloro-m-xylene 80 90 36 - 144 DCB Decachlorobiphenyl

Method: 531.1 - Carbamate Pesticides (HPLC)

Lab Sample ID: MB 680-571548/4 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 571548

Prep Type: Total/NA

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Dil Fac Analyzed Carbaryl 0.250 U 2.50 0.250 ug/L 05/24/19 14:26

Lab Sample ID: LCS 680-571548/5

Client Sample ID: Lab Control Sample

Matrix: Water

Analysis Batch: 571548

Spike LCS LCS %Rec. Added Limits **Analyte** Result Qualifier Unit %Rec Carbaryl 10.0 7.601 ug/L 76 80 - 120

Lab Sample ID: LCSD 680-571548/6 **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Matrix: Water

Analysis Databy 574549

Alialysis Dalcii. 37 1340									
-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Carbaryl	10.0	8.951		ua/L		90	80 - 120	16	20

6/9/2019 (Rev. 1)

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

GC/MS Semi VOA

Prep Batch: 143150	Pre	рΒ	atc	h: 1	431	50
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	3510C	
MB 200-143150/1-A	Method Blank	Total/NA	Water	3510C	
LCS 200-143150/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 200-143150/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 143256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	Organotins/GCM S	143150
MB 200-143150/1-A	Method Blank	Total/NA	Water	Organotins/GCM S	143150
LCS 200-143150/2-A	Lab Control Sample	Total/NA	Water	Organotins/GCM S	143150
LCSD 200-143150/3-A	Lab Control Sample Dup	Total/NA	Water	Organotins/GCM S	143150

Prep Batch: 162753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	CWA_Prep_CLL	
MB 560-162753/1-A	Method Blank	Total/NA	Water	CWA_Prep_CLL	
LCS 560-162753/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep_CLL E	
LCSD 560-162753/3-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep_CLL E	

Analysis Batch: 162775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	625	162753
MB 560-162753/1-A	Method Blank	Total/NA	Water	625	162753
LCS 560-162753/2-A	Lab Control Sample	Total/NA	Water	625	162753
LCSD 560-162753/3-A	Lab Control Sample Dup	Total/NA	Water	625	162753

Prep Batch: 296808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	3510C	
MB 320-296808/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-296808/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-296808/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 296960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	WS-MS-0010	296808
MB 320-296808/1-A	Method Blank	Total/NA	Water	WS-MS-0010	296808
LCS 320-296808/2-A	Lab Control Sample	Total/NA	Water	WS-MS-0010	296808
LCSD 320-296808/3-A	Lab Control Sample Dup	Total/NA	Water	WS-MS-0010	296808

GC Semi VOA

Prep Batch: 265085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	608	<u> </u>

Eurofins TestAmerica, Houston

Page 14 of 31

QC Association Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

GC Semi VOA (Continued)

Prep Batch: 265085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-265085/1-A	Method Blank	Total/NA	Water	608	
LCS 600-265085/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 600-265085/9-A	Lab Control Sample	Total/NA	Water	608	
LCSD 600-265085/10-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 600-265085/3-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 265203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	608	265085
MB 600-265085/1-A	Method Blank	Total/NA	Water	608	265085
LCS 600-265085/2-A	Lab Control Sample	Total/NA	Water	608	265085
LCS 600-265085/9-A	Lab Control Sample	Total/NA	Water	608	265085
LCSD 600-265085/10-A	Lab Control Sample Dup	Total/NA	Water	608	265085
LCSD 600-265085/3-A	Lab Control Sample Dup	Total/NA	Water	608	265085

HPLC/IC

Analysis Batch: 571548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185398-1	WW-20190512-002-Day 10	Total/NA	Water	531.1	<u> </u>
MB 680-571548/4	Method Blank	Total/NA	Water	531.1	
LCS 680-571548/5	Lab Control Sample	Total/NA	Water	531.1	
LCSD 680-571548/6	Lab Control Sample Dup	Total/NA	Water	531.1	

Lab Chronicle

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Client Sample ID: WW-20190512-002-Day 10 Lab Sample ID: 600-185398-1

Date Collected: 05/12/19 11:30 Matrix: Water Date Received: 05/13/19 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	CWA_Prep_CLLE			250 mL	1 mL	162753	05/17/19 15:00	OV56	TAL CC
Total/NA	Analysis	625		1			162775	05/20/19 09:07	GEF	TAL CC
Total/NA	Prep	3510C			1010 mL	5 mL	143150	05/17/19 13:00	CSB	TAL BUR
Total/NA	Analysis	Organotins/GCMS		1			143256	05/22/19 12:40	A1B	TAL BUR
Total/NA	Prep	3510C			997.8 mL	0.5 mL	296808	05/24/19 12:45	TWL	TAL SAC
Total/NA	Analysis	WS-MS-0010		1			296960	05/24/19 23:23	M1A	TAL SAC
Total/NA	Prep	608			250 mL	5.0 mL	265085	05/15/19 08:42	LER	TAL HOU
Total/NA	Analysis	608		1			265203	05/16/19 19:52	JAL	TAL HOU

1 mL

1 mL

571548

05/25/19 00:55 UI

Laboratory References:

Analysis

531.1

Total/NA

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL CC = Eurofins TestAmerica, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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TAL SAV

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Accreditation/Certification Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Гехаѕ	NELAP		6	T104704223-18-23	10-31-19
The following analytes	s are included in this repo	rt, but the laboratory is	not certified by the	e governing authority. This	list may include analytes for whi
the agency does not o	offer certification.	•	,	,	,
the agency does not of Analysis Method	offer certification. Prep Method	Matrix	Analyt		
0 ,		Matrix Water	•	e	

Laboratory: Eurofins TestAmerica, Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
ANAB	DoD	 -	L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-20
Florida	NELAP	4	E87467	06-30-19 *
Minnesota	NELAP	5	050-999-436	12-31-19
New Hampshire	NELAP	1	2006	12-18-19
New Jersey	NELAP	2	VT972	06-30-19 *
New York	NELAP	2	10391	04-01-20
Pennsylvania	NELAP	3	68-00489	04-30-20
Rhode Island	State Program	1	LAO00298	12-30-19
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-19
Virginia	NELAP	3	460209	12-14-19

Laboratory: Eurofins TestAmerica, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority Oklahoma	Program State Program	EPA Region	Identification Number 2018-070	Expiration Date 08-31-19
Texas	NELAP	6	T104704210-19-23	03-31-20
USDA	Federal		P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Texas	NELAP		6	T104704399	05-31-20
	•	rt, but the laboratory is	s not certified by the	e governing authority. Thi	s list may include analytes for wh
the agency does not	offer certification.				
the agency does not on the Analysis Method	offer certification. Prep Method	Matrix	Analyt	e	
0 ,		Matrix Water	Analyt		

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Cardno, Inc Job ID: 600-185398-1

Project/Site: ITC WW-20190512-002-Day 10 05-12-19

Laboratory: Eurofins TestAmerica, Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
exas	NELAP		6	T104704185-19-12	11-30-19
The following englists	a ara inaludad in thia rana	rt but the leberatory i	not contified by th	a acusaraina quitharitu. Thia	list may include analy
,	•	rt, but the laboratory is	s not certified by the	e governing authority. This	list may include analy
The following analyte the agency does not	•	rt, but the laboratory is	s not certified by the	e governing authority. This	list may include analy
,	•	rt, but the laboratory is Matrix	s not certified by the Analyt	,	list may include analy

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6310 Rothway Street

Chain of Custody Record

eurofins

Houston, TX 77040

Client Information	Sampler C. Pilla,	R.FR	122011		r, Dea	n A	-				Carrier Tr	acking No(s):		COC No: 600-68340-	18674.1
Client Contact: Ms. Cheryl Hennessy	Phone:			E-Mail dean		@test	tamer	ricainc	com					Page: Page 1 of 1	
Company:				1000	10	<u></u>								Job#:	
Cardno, Inc Address:	Due Date Requested:			_	_				Analy	SIS H	Requeste	1	T T	Preservation	Codes:
970 Wedgewood Drive	Due Date Requested:							1		1			1 1	A - HCL	M - Hexane
City: Crystal Lake	TAT Requested (days		ed (days):											B - NaOH C - Zn Acetate D - Nitric Acid	N - None
State, Zip: IL, 60014								- 1		1	1 1	1 1	1	E - NaHSO4	Q - Na2SO3
Phone:	PO#: Purchase Order R	tequested			(oN									F - MeOH G - Amchlor H - Ascorbic A	R - Na2S2O3 S - H2SO4 cid T - TSP Dodecahydrate
Email:	WO #:				0 0			1 3	Project List			1 1 1		1 - Ice J - DI Water	U - Acetone V - MCAA
cheryl.randle@cardno.com Project Name:	Project #:				Yes or or No)		TBT Only		oject					K-EDTA	W - pH 4-5
TC Deer Park Water Samples	60010840 Analyti	ical Grp: V	later Samples		yes Yes		TBT	6	m Li					L-EDA	Z - other (specify)
Site:	ssow#:				ered Sample (MS/MSD (Yes	t List	GCMS-	_	- (MOD)		8		1 1	ō	
Sample Identification	Sample Date	Sample Time	Type (v		Field Filtered	8081A - P	Organotins	S31.1 - Carbaryl	Nonyiphenois 8270C - (MOD		600-185396 Chain			Spec	ial Instructions/Note:
	Charles	1.20	The state of the state of	Vater	A L						- 5		1		
WW.20190512.002-Day 10	5/12/19	1130	0	Vater	MM	X	×	X	××		Custody		-	9	
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			1	Vater										9	
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Possible Hazard Identification Non-Hazard Flammable Skin Irritant			- di-la-sia-t					oosal To Ci		may I	be assesse Disposal			ined longer to chive For	
Deliverable Requested: I, II, III, IV, Other (specify)	Poison B Unknow	n R	adiological	-					s/QC R	equire	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO	By Lab	Al	cnive For	Months
Empty Kit Relinquished by:		Date:			Time	;	_	_		-	Me	thod of Shipme	ent:		
Reliperished by:	5/13/19	2	116	pany	ni	Rece	eived/6	00	0-	22-		Date/T	ime: /2 -	-192	15 Company
Relinquished by Colombia	Date/fime:		102 Com	pany S	05	Reor	elVed D	50	5		0	Date/J	573	19 160	Company
Relinquished by:	Date/Time:		Con	pany		Rece	eived b	y T)			Date/T	ime:		Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No						Cool	ler Ten	nperatu	re(s) °C a	ind Oth	er Remarks:				

Loc: 600

185398 Sample Receipt Cho



..... . . eceived: JOB NUMBER: CLIENT: UNPACKED BY: CARRIER/DRIVER: Custody Seal Present: YES ☐ NO Number of Coolers Received: Observed Temp Therm Corrected Temp Temp Them Cooler ID Blank Trip Blant N N N N CF = correction factor Samples received on ice? YES LABORATORY PRESERVATION OF SAMPLES REQUIRED: YES Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: YES ☐ NO pH paper Lot # VOA headspace acceptable (5-6mm): YES NO NA YES NO Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? COMMENTS:

HS-SA-WI-013

Rev. 3; 07/01/2014

6310 Rothway Street Houston, TX 77040

Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record



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Environment Testing TestAmerica

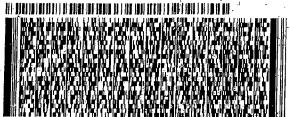
1 Holic (713) 030-4444 (ax (713) 030-3040																	_	_		
Client Information (Sub Contract Lab)	Sampler:			Lab Pl Joine		ean A	. ~					- _T -							COC No: 600-39525.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail dean		er@te	estame	ericai	inc.co	m		•	tate of exas	Origin:					Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.						ditation			See no	ote):		•							Job #: 600-185398-1	
Address:	Due Date Request	ed:																	Preservation Co	odes:
30 Community Drive, Suite 11,	5/20/2019 TAT Requested (d	ave).			.3			т—	An	nalys	is R	equ	este	ed	_	—		—	A - HCL	M - Hexane
South Burlington	TAT Requested (d	ayə,.			54. 42		1											.	B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: VT, 05403					-														D - Nitric Acid E - NaHSO4 F - MeOH	P - Na2O4S Q - Na2SO3 R - Na2S2O3
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:					5													G - Amchlor	S - H2SO4
Email:	WO #:				or No)	Organotins_GCMS/3510C (MOD) TBT Only													H - Ascorbic Acid I - Ice J - DI Water	T - TSP Dodecahydrate U - Acetone V - MCAA
Project Name:	Project #:				Yes	8€	.						İ					tainers	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
ITC WW-20190512-002-Day 10 05-12-19 Site:	60010840) ejc	55												重		Z - otner (specify)
ole.	SSOW#:				Sample (Yes or	MS/3						İ						of con	Other:	
			Sample	Matrix	red	<u> </u>	,													
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Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) вт=	Tissue, A=Air)	XX	× *		. Biz. 34	45 8	PE Ma	13. (7.	- 1 × 3	-53 b	- 2	< 65.5	5.340	31.025	₩	Special	Instructions/Note:
MAN 20100512 002 Day 10 (600 195208 1)	54040	11:30	1		7.87	2.3	22 2 2 2			S (38%)	3000	123	8336		+2		13 335	4		
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Note: Since laboratory accreditations are subject to change, TestAmerica Labor currently maintain accreditation in the State of Origin listed above for analysis/te Laboratories, Inc. attention immediately. If all requested accreditations are curre	sts/matrix being analy:	zed, the sample	es must be shipped	l back to the	Test/	America	a labora	atory o	r other	instruc	tions w	s. Thi vill be	s samţ provid	ole ship ed. An	ment y cha	is forwinges t	/arded o accr	l under editatio	r chain-of-custody. ion status should be	If the laboratory does not brought to TestAmerica
Possible Hazard Identification					13	Sampl	le Dis	posa	al (A	fee m	av be	e as:	sesse	ed if s	amt	oles a	are re	etain	ed longer than	1 month)
Unconfirmed							Retur							l By L					nive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank: 2	2		5	Specia								· · · · ·						
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Custody Seals Intact: Custody Seal No.: 722	236,	- a:	32 [†]			Cod	oler Ter	mperat	ture(s)	°C and	l Other	Rem	arks:	3	, (5,		8.)	>	
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HOUSTON, TX 77040 UNITED STATES US

SHIP DATE: 16MAY19 ACTWGT: 20.00 LB MAN CAD: 0758523/CAFE3211

BILL RECIPIENT

10 SHIPPING/RECEIVING TESTAMERICA LABORATORIES, INC 30 COMMUNITY DRIVE SUITE 11 **SOUTH BURLINGTON VT 05403**



1 of 2 TRK# 4840 2906 1472 17 MAY 3:00P



HOUSTON, TX 77040 UNITED STATES US

SHIPPING/RECEIVING TESTAMERICA LEGGRATORIES, INC. 30 COMMUNITY DRIVE SULTE 11 **SOUTH BURLINGTON VT 05403**



FedEx Express



2 of 2 MPS# 4840 2906 1483 Mstr# 4840 2906 1472

STANDARD OVERNIGHT 0201

05403

BTV



6310 Rothway Street Houston, TX 77040

Chain of Custody Record



eurofins:

Environment Testing TestAmerica

Phone (713) 690-4444 Fax (713) 690-5646																		
Client Information (Sub Contract Lab)	Sampler:				ь РМ: oiner, D	Dean	Α					Camer	Trackin	g No(s):			COC No: 600-39533.1	
Client Contact Shipping/Receiving	Phone.			1000	Mail: ean.joir	ner@	testar	mericai	nc.con	n		State o					Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.					Accr	reditat		equired (1,100,000					Job #: 600-185398-1	
Address	Due Date Requeste	d.			1 11-1	L/ II	TUNE	45	_	_	_	_	-	_			Preservation Cod	loe:
880 Riverside Parkway, ,	5/20/2019	*****							Ana	alysis	Req	uest	ed			_	A - HCL	M - Hexane
City West Sacramento	TAT Requested (da	iys):															B - NaOH C - Zn Acetate D - Nitric Acid	N - None O - AsNaO2 P - Na2O4S
State, Zip: CA, 95605							t List				1						E - NaHSO4 F - MeOH	Q - Na2SO3 R - Na2S2O3
Phone 916-373-5600(Tel) 916-372-1059(Fax)	PO#				9		Projec										G - Amchlar H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate
Email:	WO#.				or N	(0)	(QOM									40	I - Ice J - DI Water	U - Acetone V - MCAA
Project Name: ITC WW-20190512-002-Day 10 05-12-19	Project #: 60010840				Sample (Yes or No	Sork	3Day (containers	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site	SSOW#:				mple	D (Ye	0C_28											
		Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=wastefoil	ered	Perform MS/MSD (Yes or No)	Nonylphenols/3510C_28Day (MOD) Project List									Total Number of		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab)	BT=Tissue, A=)	- K	Pe	Š									ī	Special In	structions/Note:
	-><	> <	Preserva	tion Code	\times	\times			000							X		
WW-20190512-002-Day 10 (600-185398-1)	5/12/19	11:30 Central		Water	\mathbb{H}		X			-			+	H		2		
					П													
					+	4			+	+	H	-	-					
					H	+									+			
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Note: Since laboratory accreditations are subject to change, TestAmerica currently maintain accreditation in the State of Origin listed above for anal Laboratories. Inc. attention immediately. If all requested accreditations are	ysis/tests/matrix being analyze	ed, the sample	s must be ship	ped back to	the Test	Ameri	ica labo	ratory or	other in	struction	ries. Th	is samp e provid	ole ship led. An	ment is f y change	orwarded es to accr	d under reditati	r chain-of-custody. If to on status should be br	he laboratory does not ought to TestAmerica
Possible Hazard Identification					5	Sam	7			e may					s are r		ed longer than 1	month)
Unconfirmed						_	_	ım To 0					I By L	ab		Arch	nive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Delivera	able Rank: 2	2		8	Spec	ial Ins	truction	is/QC	Requi	emen	ts:						
Empty Kit Relinquished by:		Date:			Tim							M	ethod o	f Shipme				
Relinquished by: Half	Date/Time:	· /	200	Company	H		eceived	Ku	~	cu	78	v		Date/I	117	15	9 935	Company Company
Relinquished by:	Date/Time:			Company		R	eceived	f by:						Date/1	Time:			Company
							ant =		- f - b - 0 -			e state o						1
Custody Seals Intact: Custody Seal No.: 7 3	2 235					C	ooler T	emperati	ire(s) °C	and Ot	ner Ren	narks:	-	2.9	00			















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Ver: 01/16/2019

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6310 Rothway Street Houston, TX 77040

Chain of Custody Record



eurofins

Environment Testing TestAmerica

Phone (713) 690-4444 Fax (713) 690-5646																			
Client Information (Sub Contract Lab)	Sampler:			Lab I Join		ean A					C	arrier Tra	acking I	No(s):			COC No: 600-39527.1		
Client Contact Shipping/Receiving	Phone:			E-Ma dea		ner@te	estam	ericain	c.com			tate of O exas	rigin:				Page: Page 1 of 1		
Company: TestAmerica Laboratories, Inc.						reditatio LAP -		uired (Se	ee note)	:							Job #: 600-185398-1		
Address: 1733 N. Padre Island Drive, ,	Due Date Requeste 5/20/2019	ed:							Ana	lysis	Requ	estec	i				Preservation Code A - HCL-	M - Hexane	
City: Corpus Christi	TAT Requested (da	ays):			П												B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State, Zip: TX, 78408																	E - NaHSO4	P - Na2O4S Q - Na2SO3 R - Na2S2O3	3
Phone: 361-289-2673(Tel) 361-289-2471(Fax)	PO #:				No)	to to										279	G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dode	
Email:	WO #:					or No)		Н								2	J - DI Water	U - Acetone V - MCAA W - pH 4-5	
Project Name: ITC WW-20190512-002-Day 10 05-12-19	Project #: 60010840				le (Ye	es or										containers		Z - other (spe	ecify)
Site:	SSOW#:				Samp	MS/MSD (Yes										9	Other:		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	G=grab) BT			Perform MS/MSD (Yes							-			Total Number	Special Ins	structions/	Note:
		11:30	Preservatio	1 Code:	M	X_				2011		200	1000			\triangle		Carried State of the	
WW-20190512-002-Day 10 (600-185398-1)	5/12/19	Central		Water	Н	×		H	-	+	1	+	H		\perp	2			
					H	+	+	\vdash	+	+	H	+	Н		+				
					Н	+	+	\vdash	+	+	\vdash	+	Н	-	+				
					Н	+	+	H	+	+	H	+	H		+				
					Н	+	+	\forall	+	+	\vdash	+	\vdash		+				
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					Ħ	\top	+	\Box		+	\Box	+	H		\forall				
					Ħ										\top				
Note: Since laboratory accreditations are subject to change, TestAmerica Laborate currently maintain accreditation in the State of Origin listed above for analysis/test Laboratories, Inc. attention immediately. If all requested accreditations are curren	s/matrix being analyz	ed, the sample	s must be shipped	back to the	e Test	America	a labora	atory or o	ther ins	truction									
Possible Hazard Identification					1			-		may							ed longer than 1 r		
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Delivera	able Rank: 2	2		-			n To Co		Requir		sposal l	By Lai	ь	<u> </u>	Archi	ive For	Months	
Empty Kit Relinquished by:		Date:			Tim	ne:					_	Meth	nod of S	Shipment:	_				
Relinquished by:	Date/Time:	11	100 Con	npany	7		ceived	by:	25	e	X			Date/Tim	e:]-)-1	9 9:32	Company	
Relinquished by:	Date/Time:	-10	Cor	npany		Re	ceived	by:)		Date/Tim	e:		11.3	Company	
Relinquished by:	Date/Time:		Col	npany		Re	ceived	by:						Date/Tim	e:			Company	
Custody Seals Intact: Custody Seal No.:						Co	oler Te	mperatur	e(s) °C	and Oth	er Rema	arks:	2-(()	_	-().10/-0	50	P
2 100 2 110						_						- 11						Ver: 01/16/	2019

















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6310 Rothway Street Houston, TX 77040 **Chain of Custody Record**

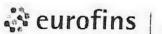


🔆 eurofins

Environment Testing TestAmerica

Phone (713) 690-4444 Fax (713) 690-5646																		
Client Information (Sub Contract Lab)	Sampler			100,000	PM iner, [Dean	n A				Carri	er Tracki	ng No(s)			COC No 600-39534.1		
Client Contact: Shipping/Receiving	Phone:			E-M dea	an.joi	_		merica			State	of Originas				Page: Page 1 of 1		
Company TestAmerica Laboratories, Inc.							tions R	lequired ((See note	2)						Job #: 600-185398-1		
Address	Due Date Requeste	d:			\top						_				\rightarrow	Preservation Cod	les:	
5102 LaRoche Avenue,	5/20/2019 TAT Requested (da	uet:			-				Ana	alysis	Reques	sted		_		A - HCL	M - Hexane	
City. Savannah	TAT Requested (da	iys).														B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State, Zip													1 1			D - Nitric Acid E - NaHSO4	P - Na2O4S	
GA, 31404					-11				1			1 1	1 1	1 1		F - MeOH	Q - Na2SO3 R - Na2S2O3	
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO#.								1 1							G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahy	drate
Email:	WO#:				or No	0							11		to.	I - Ice J - DI Water	U - Acetone V - MCAA	J. J. C.
Project Name:	Project #				Yes	0									inei	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
ITC WW-20190512-002-Day 10 05-12-19	60010840				ble	Yes			1						containe	Other:		
Site.	SSOW#				Sample (Yes	ISD (Yes or No)			1 1						of ce	Other:		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab) Preservati		eld Filtered	1000	531.1/ Carbaryl								Total Number	Special In	nstructions/Note	»:
WW-20190512-002-Day 10 (600-185398-1)	5/12/19	11:30	1 1C3C1 Valu	Water	A		X		-	15 3550					2	N. C. C.		
		Central																
					+			-	-	-		1	-	+				
					+			+		+		++	++	+				
Note: Since laboratory accreditations are subject to change, TestAmeric currently maintain accreditation in the State of Origin listed above for an Laboratories, Inc. attention immediately. If all requested accreditations a	alysis/tests/matrix being analyz	ed, the sampl	es must be shipp	ed back to	the Te	stAme	erica lal	boratory (or other i	nstructions	ies. This s s will be pro	ample shovided. A	ipment is fo	orwarded us to accred	under ditatio	chain-of-custody. If on status should be b	the laboratory does rought to TestAmeric	not ca
Possible Hazard Identification						Sar	mple l	Dispos	al (A f	ee may	be asse	ssed if	samples	are ret	taine	ed longer than 1	month)	
Unconfirmed						L	Re	turn To	Client	L	Disp	osal By	Lab		Arch	ive For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank:	2			Spe	ecial Ir	nstructi	ons/QC	Require	ements:							
Empty Kit Relinquished by:		Date:			Tir	me:						Method	of Shipmer					
Relinquished by: Relinquished by:	S Date/Time	1100)()	Company			Receiv		-	31	n		Date/T	-14-	12	0105	Company Company	
J													La di Cari				Company	
Relinquished by:	Date/Time:		C	ompany			Receiv	red by					Date/T	ime			Company	
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No							Cooler	Tempera	ature(s) ^s	C and Oth	ner Remark	(S)			5.	4/5.4		

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Environment Testing TestAmerica



ramento Campie I Wood III Notes

this form to record Sample Custody Seal, Cooler Custod in the job folder with the COC.	1	er obse	rvations.
Notes:	Therm. ID: AK7 Corr. Factor: Ice Wet Gel O Cooler Custody Seal: 731235 Sample Custody Seal: Cooler ID:	ther_	
WA V	Temp Observed: 2.9 Corrected: Corrected: NCM Filed: Yes □ No □		
	Perchlorate has headspace? Alkalinity has no headspace? CoC is complete w/o discrepancies? Samples received within holding time? Sample preservatives verified? Cooler compromised/tampered with? Samples compromised/tampered with? Samples w/o discrepancies? Sample containers have legible labels? Containers are not broken or leaking? Sample date/times are provided. Appropriate containers are used? Sample bottles are completely filled? Zero headspace?* Multiphasic samples are not present?		

Client: Cardno, Inc Job Number: 600-185398-1

Login Number: 185398 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Crafton, Tommie S

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Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4, 5.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Client: Cardno, Inc

Job Number: 600-185398-1

Login Number: 185398

List Number: 2

Creator: McNabb, Robert W

List Source: Eurofins TestAmerica, Burlington

List Creation: 05/17/19 11:01 AM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey neter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	732236, 732232
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0°C, 1.8°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: Cardno, Inc Job Number: 600-185398-1

List Number: 185398 List Source: Eurofins TestAmerica, Corpus Christi
List Number: 3 List Creation: 05/17/19 10:24 AM

Creator: Viveros, Ashley D

Creator. Viveros, Asiney D		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Client: Cardno, Inc Job Number: 600-185398-1

List Number: 185398 List Source: Eurofins TestAmerica, Sacramento
List Number: 5 List Creation: 05/18/19 04:56 PM

Creator: Chang, Edric D

Residual Chlorine Checked.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	732235
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

Eurofins TestAmerica, Houston

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Client: Cardno, Inc Job Number: 600-185398-1

Login Number: 185398 List Source: Eurofins TestAmerica, Savannah List Number: 4

List Creation: 05/17/19 02:25 PM

Creator: Nobles, Terry G

Quantina	Anower	Commont
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	